

## **REMARKS**

The present application includes claims 35-73. Claims 1-23 have been withdrawn from consideration. Claims 1-23 have now been cancelled without prejudice toward continuation of prosecution thereof in a divisional application. Claims 24-34 have been rejected. Claims 24-34 have now been cancelled, without prejudice, and new claims 35-73 added. A petition requesting that the present application claim priority from US patent application 10/483,528, is submitted herewith, along with a Supplemental Application Data Sheet that includes the new priority claims. The official action of April 14, 2009, has now been carefully studied. Reconsideration and allowance are respectfully urged.

Claims 24, 30, 31 and 32 have been rejected under 35 USC 112, second paragraph, as being indefinite. In view of the 112 rejections, applicant has replaced the rejected claims with a new set of claims, and the patentability of these claims will be discussed herein. The new claims do not have the indefiniteness pointed out by the examiner for the rejected claims and thus these rejections have now been obviated. Reconsideration and withdrawal of these rejections are therefore respectfully urged.

### **Support**

Claim 35 finds support at least in the passages on page 229, line 21, page 24, lines 21-22, page 156, lines 5-9, page 163, lines 3-5, page 86, line 19 – page 87, line 3, Page 183, lines 7-19, page 144, lines 15-23 and page 193, lines 5-14.

Claims 36-38 find support at least on page 25, lines 16-21 and page 183, lines 10-19. Claim 39 finds support at least on page 65, lines 11-14. Claim 40 finds support at least on pages 25 and 65. Claim 41 finds support at least on page 234, line 4. Claim 42 finds

support at least on page 154, line 9 and in Fig. 45C. Claim 43 finds support at least on page 47, line 23 – page 48, line 1. Claim 44 finds support at least in Fig. 47A. Claim 45 finds support at least in Fig. 47B. Claims 46-47 find support at least on page 207, lines 23-24. Claim 48 finds support at least on page 27 lines 13-18, page 32 lines 3-12 and page 35 lines 4-11. Claim 49 finds support at least on pages 27 and 32. Claim 50 finds support at least on page 25, lines 8-14. Claims 51-52 find support at least in Figs. 45C. Claims 53-55 find support at least on page 209, lines 19-23 and page 225.

Claims 56-59 find support at least on page 24, lines 21-22, page 209, lines 19-23, page 225, lines 1-17, page 156, lines 5-9 and page 163, lines 3-5.

Claim 60 finds support at least on pages 155-156 and page 162, line 10.

Claim 61 finds support at least in Fig. 47B. Claims 62-64 find support at least on page 162, lines 2-10. Claims 65 and 68 find support at least in Fig. 47A. Claim 66 finds support at least on page 156, line 8. Claim 67 finds support at least on page 209, lines 19-23. Claims 69-70 find support at least on page 207, lines 23-24. Claim 71 finds support at least on page 156, lines 1-2. Claim 72 finds support at least in Fig. 71A. Claim 73 finds support at least in Figs. 62A, 47A and 47E.

### **102 and 103 rejections**

Claims 24-27 and 30-32 were rejected under 35 USC 102(b) as being anticipated by Vale (US patent 6,359,572).

Claims 29 and 33-34 were rejected under 35 USC 103(a) as being unpatentable over Vale (US patent 6,359,572).

Claim 28 was rejected under 35 USC 103(a) as being unpatentable over Vale (US patent 6,359,572) in view of Pratley et al. (US patent 6,356,866).

All of the rejected claims have now been deleted in favor of new claims 35-73. To the extent that the previous rejections may be applicable to the new claims, these rejections are respectfully traversed.

**Independent claim 35**

Claim 35 requires “an input unit adapted to receive four different first input signals, each associated with a group of symbols and together associated with all the letters of an alphabet of a language”.

Regarding this requirement, previously appearing in claim 29, the Examiner stated:

“Vale does not teach wherein substantially all of said letters are assigned to four of said input signals. However ... is an obvious design choice, because the number of letters that are assigned to a key or button depending on once choice or preference, and also cost and size. For example, a keyboard has “!” and “1” assigned to one key .... A cell phone has “2”, “a”, “b” and “c” designated to one key”.

Applicant respectfully disagrees and submits that the Examiner has not established a *prima facie* case of obviousness.

First, it is to be noted that claim 35 requires “a word predictive system adapted to select a word ... selecting for each of the first input signals in the sequence one of the letters out of the group of symbols with which it is associated”. Therefore, unlike the examples of the examiner in which the user selects which of the symbols with which a key is associated is to be used in a specific word at the time at which the key is pressed (for example, by using a shift button or by tapping a number of times), claim 35 requires that the word predictive system select which of the symbols is to be used, for example based on

frequency of use of different words as described on page 193 of the present application and/or responsive to additional user signals, as described on page 183 of the present application.

As to the selection of the number of input signals to which the letters are assigned, this is not a mere obvious design choice. The number of letters assigned to a key, which is a direct result of the number of keys or other input signals to which the letters are assigned, has an effect on the ability of the word predictive system to properly guess words. The more letters are assigned to each signal, the harder it is for the word predictive system to guess the word intended by the user. Vale is an example of the understanding in the art of this problem. While Vale realizes that there is a need to use smaller keyboards (col. 1, lines 42-46), applicant did not find any teaching in Vale to use less than 26 keys for the letters of the alphabet (see Figs. 15-18, for example).

Use of keys corresponding to a plurality of letters of the alphabet is known in the art. US patent 5,818,437 to Grover et al., describes an embodiment in which the letters of the alphabet are distributed between nine keys (Fig. 7g, for example) and an embodiment in which the letters of the alphabet are distributed between 7 keys (Fig. 13).

The statement of Grover on col. 1, lines 45-46: "Alternative embodiments have as few as three or as many as twenty keys", cannot possibly relate to an embodiment covering all the letters of the alphabet as required by claim 35. This is because one of the keys is required to be the "select" key (see abstract) and hence only two keys are used for a plurality of letters. Nowhere does Grover suggest that all the letters of the alphabet are assigned to these two keys or does Grover describe how the system determines the intended

word based on these keys. It is therefore assumed that the embodiments of few keys relate to cases in which few letters are used.

The stand of the prior art is articulated by US patent 6,734,881 to Will, which states (col. 1, line 64): “as the number of keys gets smaller, the chances increase that the user must enter a very long sequence of keystrokes before the desired word is displayed, or even that the desired word will never be displayed.”. The smallest number of groups covering the alphabet in US patent 6,734,881 to Will is therefore five (col. 4, lines 46-48). Applicant notes that the difference between 5 keys and 4 keys is quite substantial. For a word including five letters, the number of possible letter combinations of a five letter word, assuming one of the keys corresponds to six letters and the rest correspond to five letters, is  $5 \times 5 \times 5 \times 5 \times 6 = 3750$ . The number of possible letter combinations of a five letter word for four keys, assuming two correspond to 7 letters and three correspond to six letters, is  $6 \times 6 \times 6 \times 7 \times 7 = 10584$ , nearly three times greater! It would not be a simple design choice to reduce the number of keys under these circumstances. The inventor of the present invention determined that the gain in ease of use to the human user from using only four input signals for all the letters outweighs the drawbacks in reducing the number of signals. Stating that such a decision is obvious, without bringing a teaching in the art, is impermissible hindsight.

### **Dependent claims**

At least some of the dependent claims add further patentability over the art. Claim 43, for example, requires that the four input signals are provided by keys arranged in two columns, separated by a section not containing keys. Claim 44 requires that the columns are distanced from each other by a distance substantially greater than the widths of the keys. Claim 45 requires that the columns are located on opposite sides of a screen of the system. None of these possibilities is taught or suggested by the art. As shown in Vale and in Grover, the keys carrying letters are positioned next to each other. It is further noted that even if separation of keys can be demonstrated in the art for a large number of keys, this does not imply that it would be obvious to separate the letter keys of a limited number of keys, such as four keys assigned all the letters of the alphabet.

**Independent claims 56 and 60**

Claim 56 requires a plurality of letter keys arranged such that a user can touch all the keys concurrently with two fingers, in a manner which allows selectively actuating each of the keys by one of the two fingers.

This is not taught or suggested by Valey. The number of keys presented by Valey is such that this is completely impossible.

Claim 60 requires that the plurality of keys associated with all the letters of an alphabet of a language are arranged in two groups each on an opposite end of the device, the groups being separated by a section not containing keys. As discussed above, this is not described by Vale.

**Conclusion**

Applicants respectfully submit that in view of the above arguments the claims are allowable. Allowance of the application is respectfully awaited. If, however, the Examiner has a problem with allowing one or more of the claims, applicant suggests that the Examiner contact the undersigned to set up a telephonic interview with applicant's attorney.

Respectfully submitted,

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